Pamwin Component Accounting User Manual

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Introduction

What is component accounting?

Social landlords will have to introduce component accounting under enhancements to the SORP, where they account for the various parts of houses (eg kitchens, roofs and bathrooms) separately, rather than as one home as at present. The change is likely to come into effect for March 2011.

Component accounting is based on life-cycle costing. The major building components that require renewal during the lifetime of the building are identified, with their lives and renewal costs.

There is no standard list of these components, or the extent to which they might be broken down into significant sub-components. For example, a kitchen is made up of kitchen units, work surfaces, floor finishes etc, each of which could have a different live and renewal cost. The consultation documents on interpreting the SORP all indicate a general view that these should be broadly identified, with lists such as kitchens, bathrooms, boilers, heating systems, windows, roofs, fences etc.

There is no standard list of component lives and renewal costs. M3 Housing publish the NHF Schedule of Rates Planned Maintenance Module which includes the lives and renewal costs of major building components. But this is only one source, and opinions on lives and costs vary widely.

The methodology is fairly straightforward. A matrix is created on a spreadsheet listing the major components in rows down the page, and each future year in columns across the page, up to 80 or 100 years. If the average life of a boiler is expected to be 15 years, then the current cost of renewing the boiler is shown in the 15th, 30th, 45th, 60th,75th, and 90th year. The same is done for all the other components. The projected costs in each year are then totalled to give the forecast renewal costs over each of the next 80 to 100 years, at current prices. You can see this calculation on the LCC sheet.

Life cycle costing has been used in maintenance planning systems for many years, to forecast the expected level of demand for major repairs based on stock condition data collected from surveys. So most social housing providers will already have some idea of the component lives and costs they might require for this purpose. The surveyor estimates the age of the relevant building components so as to assess their remaining lives, which is then fed into the life-cycle costing analysis.

Why do it in Pamwin?

Most Pamwin clients currently use standard major repair provisions, expressed either as a percentage of the reconstruction cost, or as an amount per unit. Some use standard levels of provision, as previously recommended by the National Housing Federation. The best known of these is a regular new build MRP at 0.8% of the reconstruction cost, or a slow-start MRP with nothing for the first five years, 0.3% for the next five, 0.6% for the following, and an additional 0.3% added to each subsequent five year period, with no further increase after year 30.

These standard major repair provisions make no attempt to explore the benefits of using higher quality building components that might have longer lives, and hence might have lower long term major repair costs

Others use life cycle costing to assess the expected demand for future repairs on typical building archetypes, such as one-bed flats, or three bed houses. They then calculate the level of major repair provisions needed to fund these forecast repairs, expressed either as an amount per unit in each year, or as a % of the reconstruction cost in each year. By using archetypes, they take account of the design brief to which their new developments are expected to comply. In determining the design brief they may well have explored the potential benefits of using higher quality building components that might have lower life cycle costs.

In looking at the costs and benefits of developing zero carbon homes, the additional costs of improving the energy efficiency should be balanced against the benefits of lower energy consumption. This whole life cost should include both the initial construction cost and the long term life cycle costs of improved insulation, heat sinks, ground-source heat pumps, solar water heating, and the use of other technologies.

Putting a value on the lower energy consumption can be tricky, especially where the benefit to tenants from lower fuel bills cannot always be matched by an increase in charges to recoup the cost of the improvements.

Using Pamwin Component Accounting

The primary purpose of the Pamwin Component Accounting system is to calculate the level of major repair provisions required for each scheme in Pamwin, using life cycle costing.

The data should be entered by the design team (architect, contractor, or a consultant) who should identify the quantities and types of the relevant components in the scheme. The system then calculates the major repair provisions required by the scheme using life cycle costing. The design team can immediately see which components give better value for money in the longer term, and feed that in to the design process. This places the assessment of the major repair provisions required with the people that can decide on the most cost-effective design.

Having done the assessment, the spreadsheet should be attached to the scheme as a “document”, so that it can be opened from the reports menu. This is how the building components in the scheme are recorded. This assessment stays with the scheme throughout the development process, and can eventually be passed to housing management when the units are handed over.

Major repair provisions are calculated by forecasting the annual balance in a major repair fund for the scheme. Each year the fund is credited with the amount specified in the major repair provision, and debited with the cost of forecast repairs. The repair costs and major repair provisions are projected at current prices. Interest on the closing balance is debited or credited. The interest rate used is the rate net of inflation.

Goal seek (trigged by clicking on a “Calc” button) is then used to set the major repair provisions to a level that would result in the major repair fund breaking even in the target year. The HCA has suggested that major repairs should be assessed over 80 years.

Where you use regular major repair provisions (eg at 0.8% of the reconstruction cost), or slow start major repair provisions (eg rising at 0.3% every five years), goal seek can determine the reconstruction cost that would be required to generate sufficient funding. This is expressed as an amount in £ per sq m so that it can then be entered on the assumptions screen of the scheme where the reconstruction cost is calculated.

Calculating the major repair provisions for a scheme

There are three stages to calculating the major repairs for a scheme

1. Open the Pamwin Component Accounting template and use Save As to save the file in an appropriate directory with a name that identifies the scheme being appraised.
2. On the Components sheet, identify the scheme, and enter the number of houses, flats, and blocks in the scheme. Then enter the quantities against each component present in the scheme.
3. On the MRPs sheet, enter the gross floor area of the scheme, and other optional information, and click the Calc button to calculate the Major Repair Provisions

Specifying the components in a scheme

Open the Components worksheet, and enter the name of the scheme or project in cell C2.

Enter the number of houses and flats, and the number of blocks in which the flats are situated in row 3. The number of schemes is usually entered as 1.

You could enter the quantity of each component at scheme level. For example, if you have six flats, and each flat has five windows, you could simply enter 30 windows in the "scheme" column against the type of window. This is the most flexible way of entering quantities, and is particularly useful for components where the quantity depends on the size of the units and there is a mix of different sized units.

For other components, such as kitchens and bathrooms, there is usually one per unit, and it will be more convenient to enter 1 in the "per house" column and 1 in the "per flat" column. But with 6 units you could achieve the same affect by entering 6 in the "scheme" column.

	A	B	C	D	E	F	G	H	I
1		Components present							
2		**Project:**	Park Street		**Houses**	**Flats**	**Blocks**	**Schemes**	
3		**MRP assessment year:**	2009			6	6	1	
4	sort	**Component**	**Type**	**Age**	**Quantity present** The amount can be entered for the scheme(s) as a whole, or at unit or block level, but not at both				**Measure of quantity**
5					Per house	per flat	per block	scheme	
6	1	Pitched roofs	1 Concrete tiles						Sq m
7	1	Pitched roofs	1 Natural slate				30		Sq m
8	1	Pitched roofs	1 Synthetic slates						Sq m
9	1	Pitched roofs	1 Clay						Sq m
10	1	Pitched roofs	1 Other / Specialist						Sq m
11	2	Flat roofs	2 Felt				20		Sq m
12	2	Flat roofs	2 Asphalt						Sq m
13	2	Flat roofs	2 Corr mineral cement sheeting						Sq m
14	2	Flat roofs	2 Lead / other specialist						Sq m
15	2	Flat roofs	2 Other						Sq m
16	3	Chimneys and flashings	3 Pointing / Render						Item
17	3	Chimneys and flashings	3 Rebuild						Item
18	4	Rainwater Goods	4 PVC				30		Metre
19	4	Rainwater Goods	4 Cast Iron						Metre
20	4	Rainwater Goods	4 Metal						Metre
21	5	Fascia /Soffit / Bargeboards	5 Timber				30		Metre
22	5	Fascia /Soffit / Bargeboards	5 PVC						Metre
23	6	Windows	6 Timber						Item
24	6	Windows	6 PVC			7			Item
25	7	External Front / Rear doors	7 Timber						Item

A block is a convenient way of quantifying roofs and the common parts to flats. The components to be entered per block are highlighted in green in the "per block" column. By looking at these components, you should be able to decide the most convenient way of grouping the flats into blocks. If there is no obvious way, you can enter their quantities in the "scheme" column. Quite a few of these components are measured in "sq m" or "metres". The "Measure of Quantity" for each component is shown in column I.

Complete this form for all the components listed.

Non Standard Components

The component accounting spreadsheet can be configured to include “Others” at the bottom of the standard components. These are for “user defined” components, details of which are entered by the design team when they complete the form. It is up to the supervisor to decide whether to do this (see page 13).

	A	B	C	D	E	F	G	H	M	N
1		Components present								
2		**Project:**			**Houses**	**Flats**	**Blocks**	**Schemes**	Inflation	
3		**MRP assessment year:**	2009		6			1	103.50%	
4	sort	**Component**	**Type**	**Age**	**Quantity present** The amount can be entered for the scheme(s) as a whole, or at unit or block level, but not at both				Renewal Cost	Component Life
5					Per house	per flat	per block	scheme		
49	18	Communal areas	18 Communal main entr door						0	25
50	18	Communal areas	18 Door entry phone / intercom						0	15
51	19	Services	19 Boiler communal						0	20
52	19	Services	19 Wiring / emergency lighting						0	25
53	19	Services	19 Communal area finishes						41	15
54	19	Services	19 Bin stores / refuse chute						83	50
55	20	Others	enter description						0	0
56	20	Others	enter description						0	0
57	20	Others	enter description						0	0

If there are other components that are not listed, you can then add these at the bottom of the list. Enter a description for them in the Type column, and then enter the quantities as normal. For these you will also have to enter the renewal cost per item in column M, and the component life in column N. These additional cells will be coloured green indicating the need to enter data into them.

Major repairs on stock re-improvements

The same system can be used for assessing the future major repairs to existing stock. The only difference is that you also enter the age of the components in the Age column. It is almost impossible for a surveyor to guess the exact age of a component simply by looking at it, so ages are usually expressed in ranges. The table of Ages on the Setup sheet determines which year within the range will be used to determine the expected life. By default this is set to the top year in the range, so if you pick the range 11-15 it would give it an age of 15 years. But this can be changed by the supervisor.

Entering an age of 0 implies that the component needs replacing as part of the initial works on the re-improvement. So if you plan to renew the component now, enter zero in the Age column. It will then get included in the Immediate Works” on the LCC sheet. The Age is left blank on new build or complete refurbishment schemes (ie where all the renewable building components are new), and the component does not then get included in the Immediate Works.

Comparing the whole life costs of alternative components

In some cases, the Types list shows alternative qualities of component. For example, the roof covering might be concrete tiles, natural slate, or one of the other options.

Slates have a longer life than concrete tiles and therefore cost less in future repairs. You can see this by comparing the NPV in column J for the different components.

By entering their Age as zero and picking the option (in cell J3) to include current works in the NPV calculation, you can compare the whole life costs of choosing slate rather than concrete tiles. This is illustrated in the second snapshot:

	A	B	C	D	E	F	G	H	I	J
1		Components present								Include current works
2		**Project:**			**Houses**	**Flats**	**Blocks**	**Schemes**		
3		**MRP assessment year:**	2009		6			1		No
4	sort	**Component**	**Type**	**Age**	**Quantity present** The amount can be entered for the scheme(s) as a whole, or at unit or block level, but not at both				**Measure of quantity**	**NPV** Lifetime cost of forecast repairs at current prices
5					Per house	per flat	per block	scheme		9,367
6	1	Pitched roofs	1 Concrete tiles	0	30				Sq m	1,796
7	1	Pitched roofs	1 Natural slate	0	30				Sq m	1,541
8	1	Pitched roofs	1 Synthetic slates	0	30				Sq m	4,666
9	1	Pitched roofs	1 Clay	0	30				Sq m	1,364

The extra cost of the slates is then shown to outweigh the savings in future repairs, and concrete tiles come out cheaper.

In this way, the Component Accounting system can be used to assess the most economic options in the design of the properties.

	A	B	C	D	E	F	G	H	I	J
1		Components present								Include current works
2		**Project:**			**Houses**	**Flats**	**Blocks**	**Schemes**		
3		**MRP assessment year:**	2009		6			1		Yes
4	sort	**Component**	**Type**	**Age**	**Quantity present** The amount can be entered for the scheme(s) as a whole, or at unit or block level, but not at both				**Measure of quantity**	**NPV** Lifetime cost of forecast repairs at current prices
5					Per house	per flat	per block	scheme		53,893
6	1	Pitched roofs	1 Concrete tiles	0	30				Sq m	10,925
7	1	Pitched roofs	1 Natural slate	0	30				Sq m	17,935
8	1	Pitched roofs	1 Synthetic slates	0	30				Sq m	14,354
9	1	Pitched roofs	1 Clay	0	30				Sq m	10,679

In practice the lives and costs of the alternative building components may be over-simplified for this purpose. A slate roof might require a stronger roof structure, which the design team would want to take into account. And they will want to consider a wider range of design options than might be provided by the list of components included in the Component Accounting system. But it can give a useful indication.

The Life Cycle Costing calculation

The calculation of life cycle costs is done on the LCC sheet. Nothing should be entered on this sheet. But you can view it to see how they are calculated.

Calculating the major repair provisions

Once the components are fully specified on the Components sheet, the major repair provisions can be calculated on the MRPs sheet. This would normally be done by the development officer appraising the scheme. But it could also be done by the design team so as to review the major repair provisions required.

Enter the gross floor area of the scheme in C4. This should include the circulation space on flats, which is typically about 15% more than the internal floor area. This is used in calculating the reconstruction cost per square metre (see below).

You could also choose to enter the current default reconstruction cost per sq m. This will then be used to calculate the break even increment for a slow start MRP (see row 15) and the break even MRP% for a regular MRP (see row 17). It is not needed otherwise.

Enter in C7 the length of time in years over which you wish to set the MRP to break even. The HCA recommends 80 years, so this is set as the default when Pamwin Component Accounting is issued.

Click the Calc button to calculate the break even MRPs.

The system will then calculate the break even MRP for each of the standard MRP patterns specified in rows 15 to 25, as follows:

	A	B	C	D	E	F	G
1	**Major Repair Provisions**						
2							
3		Interest rate net of inflation	3.00%				
4		Gross floor area of scheme sq m	420				
5		Units	6				
6		Default reconstruction cost per sq m	1,300				
7		Default break even year	80				
8							
9							
10				Years	1	2	3
11				Forecast repairs	0	0	0
12				Forecast repairs per unit	0	0	0
13	Calc						
14	**Increment**	**Standard MRP Patterns**	**Reconstruction cost**	**Reconstruction Per sq m**			
15	0.25%	Beak even increment	546,000	1,300	0.00%	0.00%	0.00%
17		Break-even regular MRP	546,000	1,300	0.88%	0.88%	0.88%
19		Regular new build	597,838	1,423	0.80%	0.80%	0.80%
21		Regular rehab	478,270	1,139	1.00%	1.00%	1.00%
23	0.20%	Slow start new build	692,660	1,649	0.00%	0.00%	0.00%
25	0.30%	Slow start rehab	461,773	1,099	0.00%	0.00%	0.00%

Row	Pattern	Note
15	Break-even increment	This calculates the increment required for a slow start major repair provision to break even in the target year, assuming that the reconstruction cost is based on the cost per sq m in cell C6. The increment is shown in A15. The full MRP pattern over 100 years is shown in E15 to DZ15.
17	Break-even regular MRP	This calculates the level of a regular MRP as a % of reconstruction costs that breaks even in the target year. The amount is shown in F17. The full MRP pattern over 100 years is shown in E17 to DZ17.
19	Regular new build	This calculates the reconstruction cost that would be required so that a regular MRP of 0.8% of the reconstruction cost would break even in the target year. The Reconstruction Cost per sq m is shown in D19. This is the figure that should be entered on the Assumptions screen of the scheme.
21	Regular rehab	This calculates the reconstruction cost that would be required so that a regular MRP of 1% of the reconstruction cost would break even in the target year. The Reconstruction Cost per sq m is shown in D21. This is the figure that should be entered on the Assumptions screen of the scheme.

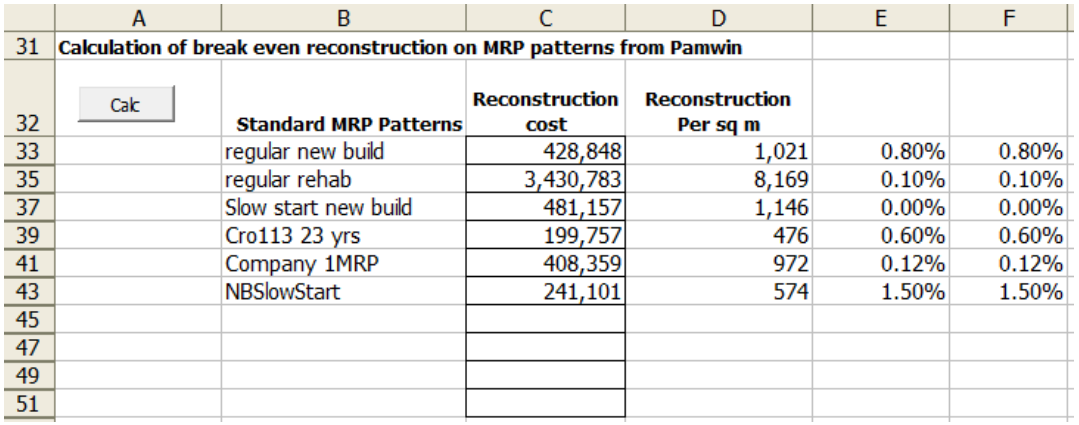
23	Slow start new build	This calculates the reconstruction cost that would be required so that a slow start MRP (starting at 0% for the first five years, and then incrementing at 0.3% every five years) would break even in the target year. The Reconstruction Cost per sq m is shown in D23. This is the figure that should be entered on the Assumptions screen of the scheme.
25	Slow stat rehab	This calculates the reconstruction cost that would be required so that a slow start MRP (starting at 0% for the first five years, and then incrementing at 0.4% every five years) would break even in the target year. The Reconstruction Cost per sq m is shown in D25. This is the figure that should be entered on the Assumptions screen of the scheme.

Calculating non standard MRPs from Pamwin

For those that use non standard major repair provisions, all the MRP patterns currently in use in their Pamwin database can be set up by the supervisor (see page 17). These will then appear starting in row 33.

Click on the Calc button in cell A32 to calculate the break even reconstruction cost per sq m for each of these patterns. The result in each case is shown in column D.

To set the reconstruction cost to the level required to generate sufficient major repair provisions, select the cost per sq m from column D for the MRP pattern that is selected on the Assumptions screen of the scheme.



	A	B	C	D	E	F
31	**Calculation of break even reconstruction on MRP patterns from Pamwin**					
32	Calc	**Standard MRP Patterns**	**Reconstruction cost**	**Reconstruction Per sq m**		
33		regular new build	428,848	1,021	0.80%	0.80%
35		regular rehab	3,430,783	8,169	0.10%	0.10%
37		Slow start new build	481,157	1,146	0.00%	0.00%
39		Cro113 23 yrs	199,757	476	0.60%	0.60%
41		Company 1MRP	408,359	972	0.12%	0.12%
43		NBSlowStart	241,101	574	1.50%	1.50%
45						
47						
49						
51						

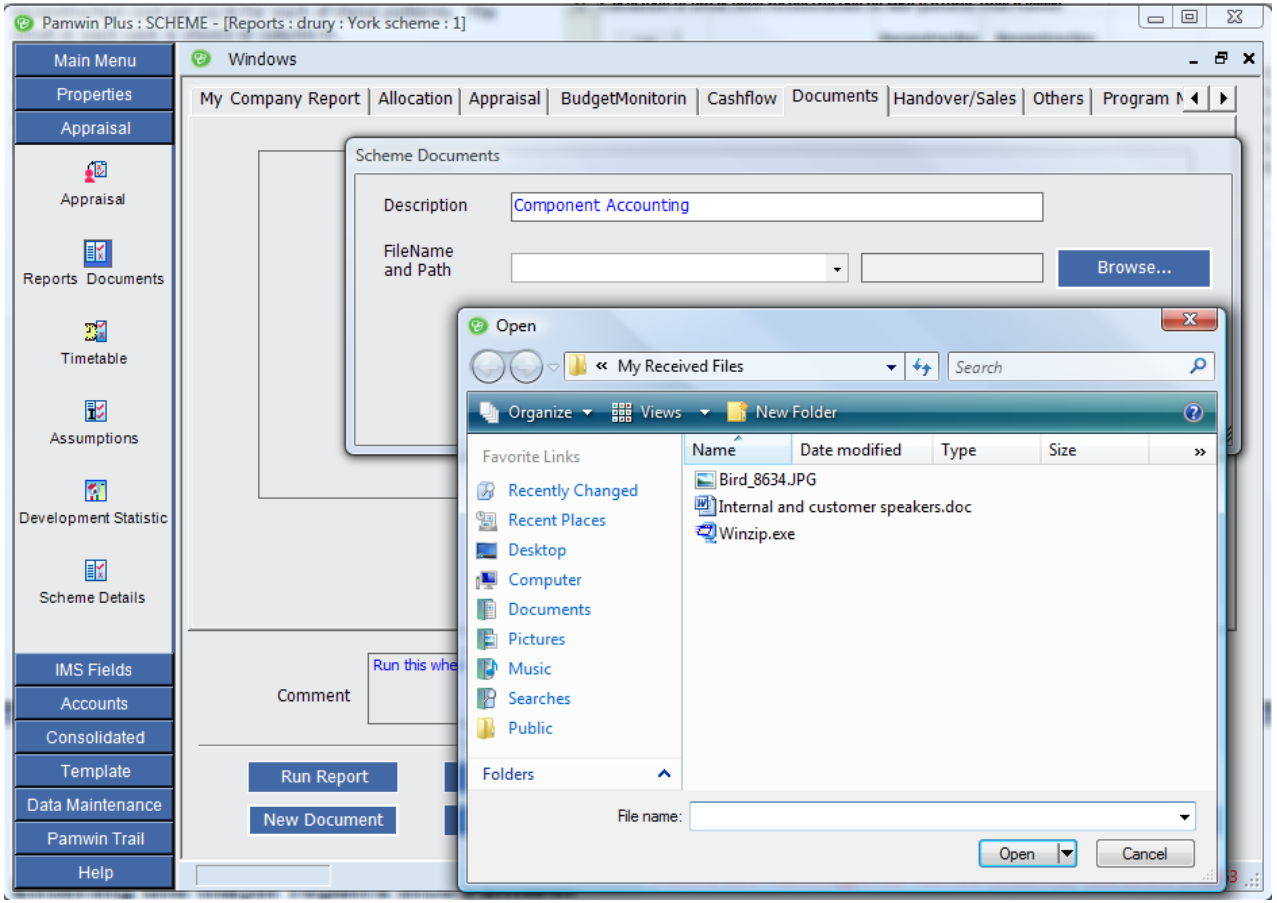
Entering the major repairs into Pamwin

Once the design team have completed the Component Accounting spreadsheet for a scheme, they should have saved it in an appropriate directory with a name that identifies the scheme.

Attaching the component accounting file to the scheme.

The development officer should then attach this file as a document to the scheme in Pamwin. This is done at the Reports Documents screen, by picking the Documents tab.

Enter a Description for the file (eg Component Accounting) and click on the Browse button to browse for the file provided by the design team. Click OK a couple of times to save it.



Adjusting the reconstruction cost

The reconstruction cost should be set so that the major repair provisions are sufficient to fund the major repairs forecast by the component accounting system.

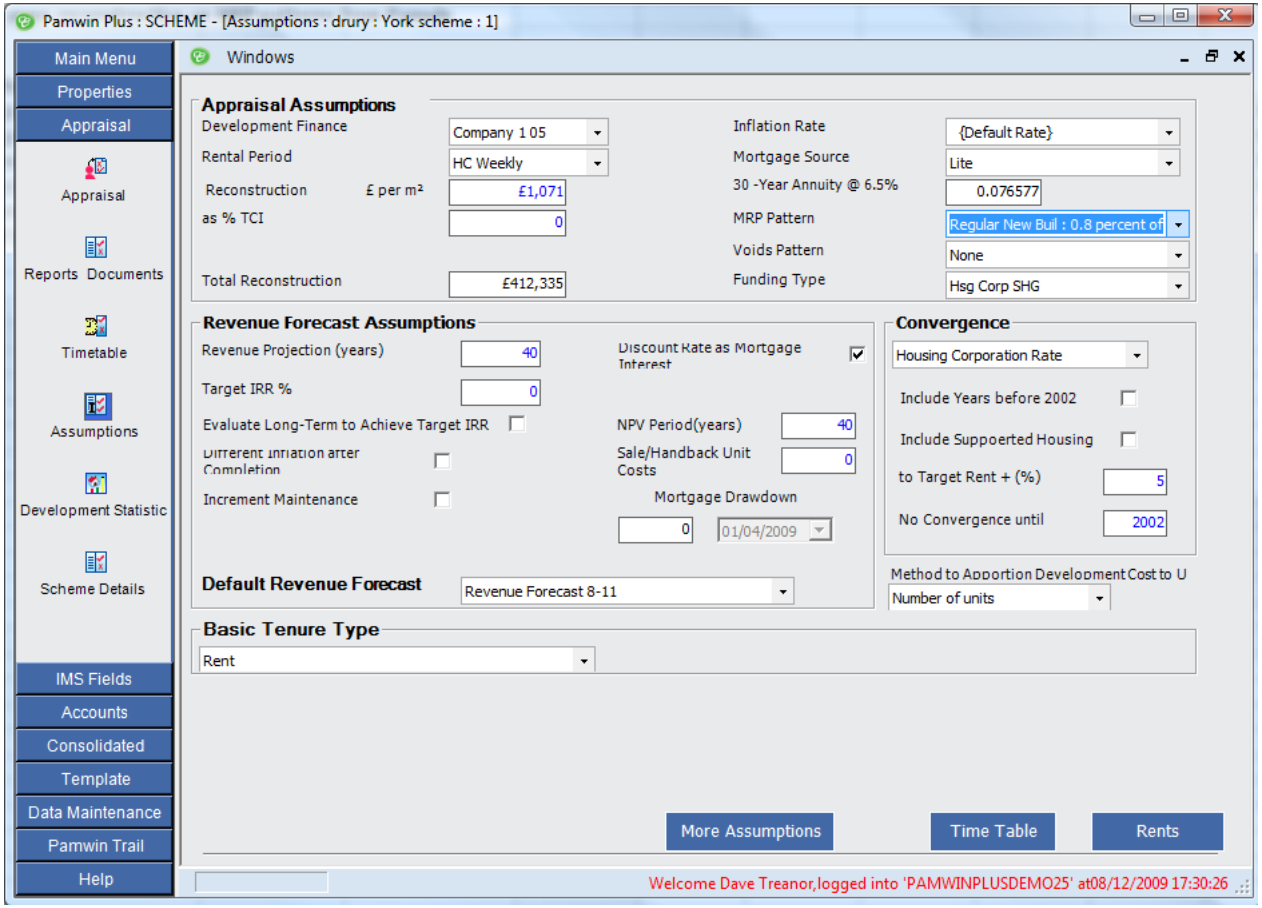
This is done at the Assumptions screen of the scheme.

Check which MRP Pattern is being used. The one illustrated here is “Regular New Build”.

Look up this pattern on the MRP sheet of the Component Accounting file. Find the Reconstruction Per Sq m in column D. In the case illustrated this is 1,021.

Enter this figure into the Reconstruction £ per m^2 field on the Assumptions screen of the scheme in Pamwin Plus.

	A	B	C	D
31	**Calculation of break even reconstruction on MRP patterns from Pamwin**			
32	Calc	**Standard MRP Patterns**	**Reconstruction cost**	**Reconstruction Per sq m**
33		regular new build	428,848	1,021
35		regular rehab	3,430,783	8,169
37		Slow start new build	481,157	1,146
39		Cro113 23 yrs	199,757	476
41		Company 1MRP	408,359	972
43		NBSlowStart	241,101	574
45				
47				
49				
51				



Setting up component accounting

Setup

This is where the system supervisor can edit the list of Components, and other tables looked up within the Component Accounting spreadsheet.

	A	B	C	D
1	**Setup**			
2				
3	**Components**	**Comp-ID**	**Default Level**	**Default Measure**
4	Pitched roofs	1	per block	Sq m
5	Flat roofs	2	per block	Sq m
6	Chimneys and flashings	3	per block	Item
7	Rainwater Goods	4	per block	Metre
8	Fascia /Soffit / Bargeboards	5	per block	Metre
9	Windows	6	per unit	Item
10	External Front / Rear doors	7	per unit	Item
11	External stores doors	8	per unit	Item
12	Garage Doors	9	per unit	Item
13	Walls	10	per block	sq m
14	Porch/balcony	11	per block	Metre
15	Fences / Gates	12	per block	Metre
16	Kitchens	13	per unit	Item
17	Bathrooms	14	per unit	Item
18	Wiring	15	per unit	Unit
19	Central Heating system	16	per unit	Unit
20	Boilers	17	per unit	Unit
21	Communal areas	18	per block	Item
22	Services	19	per block	Item
23	Others	20	special	Item
24				

Components

It is generally considered helpful to structure the list of items against which repairs are forecast. In this system we have adopted a very simple two part structure of Components, and Types. You can see these listed on the Types sheet.

In some cases, such as for roofs, the Component might be “pitched roof” while the Types might be “concrete tiles”, “slates”, “clay tiles” etc. where only one would normally be present. In other instances the Component might be Fences/Gates and the Types might be a mix of different types of fences and gates and other landscaping features, a number of which might be present.

As far as possible there should be consistency in the list of components used for stock surveys and component accounting. But they do not have to be rigidly the same. There may be reasons for sub-dividing components for stock survey purposes that are unnecessary for component accounting purposes.

You could create a completely new list of components by overwriting the ones provided. Or you could edit and extend the list. This can be done by inserting rows at any point in the list, or at the end of the list, provided they are inserted within the box containing the list.

Comp-ID — This is used to sort the list of components into a sensible sequence. It has not further meaning.

Default level — On the Components sheet, some items are best entered “per flat” and some “per block”. The default level picked here will determine which option is highlighted (in green) for that component.

Default Measure — This is the default unit of measure used in quantifying a component. It can be overridden on the Types sheet for certain types of component. For example, fences might be per “Metre” while paved areas might be per “Sq m”.

Other components

"Others" is a special case, and should only be changed if you are sure you do not need it. It is used to add "user-defined" components at the bottom of the Components sheet. The person specifying the components in a scheme can then enter a description for each additional component. They also enter a Life and Renewal Cost for each of these additional components on the Components sheet (see page 6)

Measure

The choices of units of measure are set up in the Measures table on the Setup sheet.

27	**Measure**
28	Unit
29	Sq m
30	Metre
31	Room
32	Item
33	

The list can be edited by inserting new rows with additional units of measure, provided these are inserted within the box. Or any of the units of measure listed can be overwritten and changed. But note that changing an item here does not automatically change it on the Components sheet: it merely changes the list of options that can be picked on the components sheet.

Ages

It is almost impossible for a surveyor to guess the exact age of a component simply by looking at it, so ages are usually expressed in ranges. These ranges should match the ones used by your surveyors. New rows can be inserted anywhere within the box.

35	**Ages**	Years
36	0	99
37	1-5	5
38	6-10	10
39	11-15	15
40	16-20	20
41	21-25	25
42	26-30	30
43		

The Years column in the table of Ages determines which year within the range will be used as the age of the component to determine its remaining life. By default this is set to the top year in the range, so if you pick the range 11-15 it would give it an age of 15 years. But this can be changed by the supervisor.

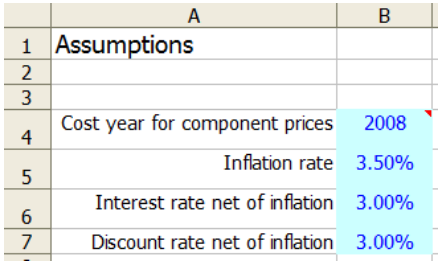
The "0" option is used to indicate that a component needs immediate renewal. The "Years" for this must be longer than the life of any of the components, so we recommend leaving this at 99.

Levels

This table cannot be edited. It is used to prompt the user whether to enter quantities for flats "per flat" or "per block" on the Components sheet. The "special" option is used for "other" components (see above).

Assumptions

This is where the economic assumptions are set, as follows:



	A	B
1	Assumptions	
2		
3		
4	Cost year for component prices	2008
5	Inflation rate	3.50%
6	Interest rate net of inflation	3.00%
7	Discount rate net of inflation	3.00%

Cost year for component prices

The renewal costs of the component types listed on the Types sheet will need inflating in future years to take account of inflation. The "cost year" entered here is the year from which they will need inflating.

Inflation rate

This is the annual rate at which the renewal costs will be inflated. On the Components sheet, the user sets the year from which the MRPs will be assessed. The renewal costs are then inflated for the number of years between the MRP Assessment Year and the Cost Year. The resulting inflation adjustment is displayed in cell M3 of the Components sheet.

Interest rate net of inflation

The calculation of break even Major Repair Provisions calculates the balance in a major repair fund at the end of each year by deducting any forecast repairs in the year, adding any contributions, and adding any interest on the balance in the fund. These projections are all at current prices. So the rate of interest should be net of inflation Strictly speaking, it should be net of inflation in reconstruction costs.

Discount rate net of inflation

The Components sheet shows the NPV of future repairs against each selected component, so that the cost in use of the different alternative components can be compared. This is calculated on the LCC sheet by applying discounted cash flow to the forecast repairs. The future repairs are projected at current prices. So the discount factor should be net of inflation. Strictly speaking it should be net of inflation in reconstruction costs.

Types

This sheet lists all the types of component against which major repairs can be forecast. How detailed this list is will be a matter of choice for each organisation.

Setting up this list is the most important part of the implementation of the Pamwin component accounting system. It will require agreement between the finance department and those responsible for stock condition surveys. There should be some consistency between the level of detail at which component accounting on existing stock is assessed, and the way it is done on new developments, so that Pamwin appraisals can show the impact of each new scheme on the organisation's overall business plan. The general rule should be to keep it as simple as possible.

The list on the Components sheet will be in the same sequence as the list you create here.

Any changes made to the list on the Types sheet will automatically get carried through to the Components sheet.

The Types sheet should be hidden once it has been edited.

New rows can be inserted anywhere within the table so as to keep similar components listed together. New rows should not be inserted on the Types sheet after quantities have been entered for a scheme on the Components sheet. If you did insert new rows on the Types sheet, the quantities for all items that follow would need to be re-entered on the Components sheet, because they would then be appearing against the wrong components.

	A	B	C	E	F	G	H
7	**Sort**	**Component**	**Choice of types**	**Measure of Qty**	**Life**	**Cost**	**Level**
8					(years)	£	
9	1	Pitched roofs	Concrete tiles	Sq m	55	49	per block
10	1	Pitched roofs	Natural slate	Sq m	80	88	per block
11	1	Pitched roofs	Synthetic slates	Sq m	35	52	per block
12	1	Pitched roofs	Clay	Sq m	65	50	per block
13	1	Pitched roofs	Other / Specialist	Sq m	35	52	per block
14	2	Flat roofs	Felt	Sq m	15	49	per block
15	2	Flat roofs	Asphalt	Sq m	30	39	per block
16	2	Flat roofs	Corr mineral cement sheeting	Sq m	20	37	per block
17	2	Flat roofs	Lead / other specialist	Sq m	50	125	per block
18	2	Flat roofs	Other	Sq m	20	40	per block
19	3	Chimneys and flashings	Pointing / Render	Item	40	180	per block
20	3	Chimneys and flashings	Rebuild	Item	60	1,030	per block
21	4	Rainwater Goods	PVC	Metre	30	16	per block
22	4	Rainwater Goods	Cast Iron	Metre	60	25	per block
23	4	Rainwater Goods	Metal	Metre	40	20	per block
24	5	Fascia /Soffit / Bargeboards	Timber	Metre	30	43	per block
25	5	Fascia /Soffit / Bargeboards	PVC	Metre	30	43	per block
26	6	Windows	Timber	Item	30	334	per unit

Sort — The Sort key is looked up from the Component entered in column B. Having edited the list of components, all rows containing components can be sorted by column A ascending, so as to get them into a sensible sequence.

Component — Pick the Component in column B, from the table of Components defined on the Setup sheet (see page 12).

Choice of types Enter a short title to identify the choice of types of the component. Some of these can alternatives (eg on Pitched roofs you could have concrete tiles, natural slate etc). Others could be sub-components, all of which might be present (eg under Fences/Gates you might have different types of fence, paths, and paved areas, all of which could be present).

Measure of Qty Having picked a Component, the default unit of quantity is looked up from the Components table on the Setup sheet. But a different unit of quantity can be selected here.

Life The expected average life of the type of component is entered in the Life column, in whole years. In practice some will last longer, and some will fail early. But for the purpose of component accounting we need a reasonable average, which is likely to relate to the way any elemental renewal programmes would be planned.

Cost This is the cost of renewing the components, including VAT and any associated on-costs. It should be the cost assuming the renewal is being carried out as part of a planned maintenance contract, as opposed to a responsive repair, or void repair. For example, gutter renewals would require scaffolding, but would normally be carried out at the same time as other roof works were undertaken. So the cost of renewing the gutters should only include a share of the scaffolding cost. Getting this right requires good judgement, based on an understanding of the way gutter renewals are carried out.

Level When dealing with flats it can be more convenient to enter the quantities for some component types (eg roofs) at block level rather than at unit level. So the Components sheet has separate columns for entering quantities per flat or per block. The user can use either column. The choice of “per unit” or “per block” in column H merely highlights the more likely choice in green on the Components sheet.

MRPs

Organisations that use only the standard Major Repair Provisions do not need to set these up – they are already provided on the MRPs sheet in rows 19 to 25.

Those that have their own unique MRP patterns should print them to Excel from Data Maintenance in Pamwin, and copy the sheet into the FromPamwin sheet. Then click on the Set Up button in row 35 of the MRPs sheet. This will copy all MRPs that are set "as % of Reconstruction" into the bottom section of the MRPs sheet.

Development officers can then use the Calc button to calculate the break even "Reconstruction per sq m" for each of these MRP patterns. See page 8.